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ABSTRACT

This pamphlet presents a range of software packages and activities for primary English teachers to use in the writing classroom. The ideas outlined in the pamphlet are designed to support writers in the various stages of the writing process within the context of a rich writing environment. The activities outlined in this pamphlet are designed for pairs or small groups of children since writing with a computer need not be a solitary act. The list of ideas and software packages is not exhaustive, but is presented as a range of possibilities which teachers and children can select from and explore further. Forty-six software packages are discussed in this pamphlet and are listed at the end. (RS)

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Our children are growing up in an electronic age and the existence of computers, telecommunications and other forms of electronic media is dramatically changing the way people communicate. Writing is not exempt from this influence. Tomorrow's adults will live in a society where the processes and products of writing may be significantly different because of technological changes. Today's writing classrooms need to offer children a wider range of opportunities to explore the electronic media along with traditional media, if they are to communicate effectively in the electronic age.

Software exists that can extend the range of writing activities available to our children at all stages of the writing process and in a variety of curriculum areas. It can even take them into the area of paperless publishing and video text systems. This software, coupled with the unique characteristics of the computer – its powerful information processing capability, its interactiveness and its versatility – provides teachers and children with a powerful educational tool. This tool is one more resource that can be used to increase children's participation in learning. To be fully utilized as a language tool, the machine and its software must be used within the context of the whole language classroom and our current understanding of children's language development. If we believe that the process approach to writing is more than just creative writing with a first draft and that editing is much more than proofreading, then we, as teachers, need to provide learning environments with structures and experiences which reflect these beliefs. Undoubtedly the computer can be a very powerful resource within such a writing environment.

The increasing use of the computer in the writing classroom does not mean the demise of pen and paper. While children will use the computer as a writing tool, they will also use a range of other traditional tools. In fact, writing with pen and paper is often an integral part of computer-based activities. Children will take up pen and paper in response to a computer program, while preparing for a computer-based activity and as a method of rewording and thinking through problems. The image of the future should not be one of a screen-based paperless society but of one where writers use the appropriate tools for the task at hand, be they computers or biros.

This PEN presents a range of software types and activities for teachers to explore, and there is a list of software at the end. The ideas outlined are designed to support writers in the various stages of the writing process within the context of a rich writing environment. In the classroom, writing with a computer need not be a solitary act – just as writing cannot be isolated from the other elements of language (reading, listening and speaking). Therefore the activities outlined in this paper are designed for pairs or small groups. The resultant child-child and children-screen interaction enhances the learning taking place.

The list of ideas and packages is not exhaustive, but is presented as a range of possibilities which teachers and children can select from and explore further. Such a list can never be static as we move towards a fuller understanding of the writing process, as the software base extends, and as we exercise our creativity when using the software.

GETTING INTO WRITING

All computer programs have the potential to excite children to write. They create opportunities for both creative and transactional writing. These in turn can extend the range of purposes for writing presented to children, encouraging them to write in forms other than 'stories'. Some software packages have as their aim the 'extraction' of print from children – they are prompters of text – while others provide a framework within which the child can write.

As children use computer programs they can:

- record what they did at the computer
- speculate on what might happen if...
- report on the events within the microworld of the program
- take imaginative leaps from an idea, a character or an event within a program
- retell or rewrite the story of the program
- further develop plots or themes encountered within the program
- experiment within the framework of a branching story.

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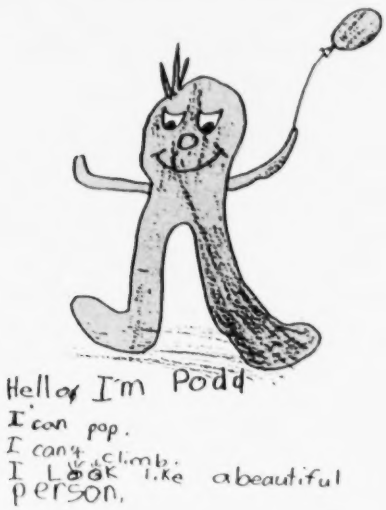
The following list outlines some of the possibilities presented by particular programs.

- Games such as PODD, TOADY, FACEMAKER and IDENT 'E' KIT can stimulate creative, written responses. Young writers can speculate on Podd's beginnings or describe Podd's actions and special world. Having drawn a face using FACEMAKER, they can write life stories, speech patterns, reward posters and further adventures.



A response to PODD from a Year 1 child.

- The 'game of the book' style of program introduces the world of ' what if ' as it offers interactive variations on many well-known fantasy and science fiction stories. Having played the adventure games based on Tolkien's THE HOBBIT or Adams' HITCHHIKER'S GUIDE TO THE GALAXY, the child may continue the ' what if ' theme and write another chapter or another book.

- There are a few programs which allow changes to their content via data statements, an inbuilt word processor, or the facility to create new files. One such program is MALLORY MANOR. Having played the detective-style adventure game, the child can rewrite it, changing location, characters and alibis. The adventure can now take place in Ancient Egypt or the school playground. The reworking of the game entails a planning session to write sequences and make changes to the original storyline.

- The graphics used in a variety of packages can provoke written reactions. Examples include the animated graphic sequence that begins SURVIVE; a picture the child has produced using a drawing package, or designed using an animating program like ANIMATION; or the coloured print-out of pre-packaged graphics using a multicoloured ribbon.

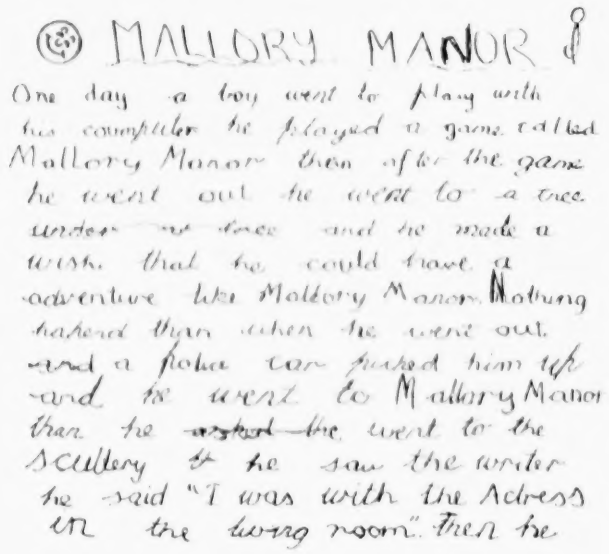
- A package designed for word recognition like PAINT WITH WORDS can be changed around and used as a prewriting activity. In this package children select a word, e.g. 'moon', move it into position on the screen and press 'return'. The word is then replaced on the screen by a matching graphic. Once all the elements are on the screen, a print-out of the picture with a word list is produced. The beginnings of a new piece of writing?

- Adventure games offer opportunities for keeping diaries and log books of explorations, mishaps and plans for the next attempts. They can stimulate further writing within the fantasy genre, either using traditional pen-and-paper methods or an adventure writer, such as VENTURE WRITER or STORY TRACKS. Such programs allow children to construct an adventure game that others can play. Children use prompts or grids for recording scenes, objects, actions, hazards, characters and locations.

- Interactive reading/writing programs, such as FANTASY ISLE and TAKE A HOLIDAY, establish a setting and multi-path storylines for the writing of a narrative. The child provides information, such as names for people and places, responds to multiple-choice questions and writes sentences, paragraphs and pages in order to complete the tale. The resultant print-out has a title page and page numbers and can be bound into a reasonably sized book – a great boost for those children who rarely produce large amounts of text.

- Other similar packages offer prompts to produce poems, narratives, letters, interactive adventures and dialogue. Peer discussion taking place around the screen can help clarify ideas.

- TALKBACK takes this concept further as it allows the created dialogue to be manipulated by a word processor. It is based on the familiar ELIZA (psychiatrist's couch) program and prompts a written response from children as they carry on a conversation with the program via the keyboard. By saving the file and then loading it into SOFT-WORD, a word processor, the text can be worked on by the child, who can change names, add speech marks and alter content.


MALLORY MANOR

One day a boy went to play with his computer he played a game called Mallory Manor then after the game he went out he went to a tree under the tree and he made a wish that he could have a adventure like Mallory Manor. Nothing happened then when he were out and a fairy can picked him up and he went to Mallory Manor then he ~~went~~ he went to the Scullery & he saw the writer he said "I was with the Adress in the living room" then he

Year 4 report on a computer activity with MALLORY MANOR.

- Programs such as TINS, WORD PLAY and CHAIN WORDS support structured, string-writing activities. They allow for the keying-in of word groups which are then used to generate sentences or, in some cases, poems or storylines.

- The integrated text and graphics capabilities of packages like KIDWRITER, STORYMAKER and EXPLORA-STORY can be used as production aids, or else the graphics can provide a prompt for text. The program WRITING ADVENTURE offers a sequence of graphics with prompting questions and space for note taking. These notes are then used for further writing.

A Year 3 ESL child's work on STORYMAKER — unfortunately, the original colour and movement can't be shown here.

- Writing tools like STORY TREE make it easier for children to produce choose-your-own or branching stories, either on screen or on paper. An important feature of these types of programs is their management of the various options and pages of text, including page numbers on the print-out for easy collation.

- Programs such as GARFIELD provide graphics which can be printed and constantly arranged and re-arranged. This provides opportunities for story-board sequencing activities, producing a variety of storylines for writing and a rich environment for discussing the concept of continuity in writing.

- The caption work required in GARFIELD and other cartoon makers can highlight the difference between writing spoken language and the more formal style of narrative.

- Newspaper emulators, e.g. NEWSROOM, FRONT PAGE and PRESS ROOM, provide the framework for banner headlines, columns and integration of graphics to produce a newspaper.

- Prepared data bases and those created by the children themselves require them to engage in a range of writing tasks as they:
  - reconstruct events
  - build and compare character sketches
  - develop arguments
  - write personal histories
  - compare viewpoints
  - explain phenomena
  - speculate on causes and effects
  - form and test hypotheses
  - design and build (i.e. write) files.

- Programs such as PRINTSHOP and PRINTMASTER allow children to explore a range of formats, including invitations, signs, notices, advertisements and logos.

- Simulation games provide children with a background within which to:
  - write descriptions of themselves and their companions within the game
  - write letters home from the game situation
  - write generalisations and hypotheses
  - map consequence paths
  - write instructions, e.g. on how to build a boat for GOLD DUST ISLAND or SHIPWRECK ISLAND
  - describe the events of the simulation from other participants' points of view, e.g. the local Aboriginal population in SETTLEMENT.

- Mathematical investigations such as FACTORY require discussion, recording and the making and testing of hypotheses. The process and outcome of the investigation can be shared with others through written reports and posters.

- TRAY, a reading program, has a 'scratch pad' facility built in which encourages the taking of notes throughout as a way of both working through the ideas and providing a basis for further writing. Such a facility also promotes discussion about choices made throughout the program.

- Computer games, even 'non-educational' ones like SPACE INVADERS and DONKEY KONG, can stimulate discussion and writing. Their sequential and episodic nature makes them very suitable for retelling activities.

CIAO BELLE E BELLO
10L
17TH MARCH 1688
CINDERFELLA DRIVES WOMEN WILD!
CALABRIA
Last night at our local fiesta, a handsome stranger caused a near riot. He appeared around 11pm and was immediately surrounded by all the women present.
"I couldn't control myself, never in my life have I seen such a man with fine clothes and remarkable features!", Shrieked a frienzied Maria Macaroni, wife of our mayor.
" I just have to have HIM!".
Her husband tried desperately to comfort her, but she cried even more. After being pursued by droves of voluptuous , passionate and over excited women, he is nowhere to be found.
We ask, " Is this a man?"
RING FOR SALE

FRONT PAGE is used here to create a sensational book report on Big Anthony and the Magic Ring.

- Children can use public electronic mail systems or file transfer systems or within-school networks to communicate with children within and beyond their classroom.

  - Children can write to electronic pen-pals, ask questions about life in different parts of the

country and share poems and stories. These systems can create a sense of immediacy, both in terms of time and place, as it takes the same time to send a message to Alaska, Broken Hill or the next suburb.

- Children can undertake collaborative writing at a distance. This may take the form of sending drafts back and forward either for amendment or for reading and adding to a continuous tale.

- Electronic mail can open up new possibilities for children with special needs. One group of children with hearing disabilities experienced informal writing styles for the first time by using a 'chat' facility.

- Children can use electronic mail and bulletin board systems, such as KEYLINK, to conduct across-state surveys and collect data for science experiments. For example, a South Australian project involved children in the collection of data from a newswire service. The children wrote articles and submitted them electronically to a 'real life' newspaper editor for comment. The edited versions were sent back for review and then published in a student newspaper.

- Children can use electronic bulletin boards to elicit and provide information. The audience can be as wide as everyone on the system. They can write requests, questions, reports, answers and comments. For example, a controversial issue can be placed on the bulletin board for comment.

As with other tools we use in life, we don't always make use of writing tools in the way the designer intended. Newspaper emulators have been used to produce rhebus stories, a book of helpful hints and a recipe book, and a branching-story writer has been used to produce a travel directory of New South Wales. This creative 'misuse' is an indication of a good tool!

THE WORD PROCESSOR: A SPECIAL TOOL

The word processor is a tool specifically designed to manipulate and format text. In industry, commerce and government it is replacing other traditional writing tools as the main way of creating, manipulating and printing the 'written word'. In the last few years it has also made its way into many of our writing classrooms. In the foreseeable future, however, classrooms will continue to be dependent on pen and paper for writing. The word processor will not become a major writing tool in the classroom unless, like pencil and paper, it is cheap, portable and very accessible.

In the classroom, at present, the word processor is most commonly used at the end of the writing process and it has enabled children to produce polished pieces of publishing, in some cases for the very first time. However, the use of the word processor need not stop here. In the context of a whole language classroom it can be a valuable resource for further developing writing skills at any or all stages in the writing process. Furthermore it can be of benefit to particular groups of children.

- Word processors with scripts for languages other than English, such as SIMPLY WRITE, can support bilingual classrooms and community language programs. Newly arrived children can continue their writing development and use a word processor 'just like the others' in the class.

- Some word processors connect to special input devices, such as concept keyboards, button boxes, pressure pads and other signal devices, which provide some children with their only means of writing.

A SPECIAL TOOL FOR WRITING

As well as managing and storing text at the composing stage, the word processor can occasionally be used in more structured ways. The structured writing activities listed below should not be seen as a complete writing program, but some children from time to time need the structure, support, prompts and demonstrations that they offer.

- Existing text files can be used to introduce (or consolidate) the idea of genre or the need for continuity. The beginning of a story (or exposition, or letter, or poem, or ...) on the screen can provide opportunities for discussion and further writing as individual children or groups add new text which is consistent in style and plot. The word processor is the manager of the text, allowing it to be scrolled back and forth, always legible. It can be edited when inconsistencies creep in and printed out for each participant to review during the final authors' circle.

- The completion of a cloze story with the insertion of details, such as names and places, into an existing storyline allows for the creation of personalised stories.

- Word processors with split-screen facilities, such as MASTERTYPE WRITER, allow the writer to see notes and outlines on one half of the screen while writing the text in the other.

- The 'save' and 'load' facilities of the word processor can be used to set up prompts and outlines within which children can write. Answers without questions (or vice versa), one-sided conversations, essay or story starters, middles, or conclusions, rhyming poems with a line or two missing, outlines of stories or essays, the features of a letter or classified ad, the structure of a haiku – all can be saved, awaiting the insertion of appropriate text by the child.

- Some word processors offer prompts as a feature. AUSSIE FRED, a public domain word processor, allows the creation of prompt boxes on the screen

for children to respond to. Only the child's writing is printed out, however.

- A keyboard 'chat' to the computer can often provide ideas which can be rearranged into an outline for writing. Turning off the screen can cut the read-write cycle in order to allow a free flow of ideas without too much concern over the form of the text.

- Concept keyboards change the input device from the conventional keyboard to touch pad. Such devices can change the unit with which the child operates from individual letters to words or phrases.

A SPECIAL TOOL FOR EDITING

Unfortunately current classroom use of the word processor for 'editing' rarely goes beyond proofreading. This reflects the emphasis placed on publishing in most writing classrooms. As more teachers devise ways of encouraging their children to revise text in terms of appropriateness for purpose and intended audience, the editing role of the word processor will expand.

- One successful strategy used by teachers to encourage such editing is collaborative writing. In collaborative writing peer discussion encourages writers to clarify ideas and to amend text. Using a word processor with the text up on the screen makes writing a more 'public' event and promotes a sense of group ownership of 'the screen'. The writing is always legible and highly visible to all members of the group, not just the scribe.

- A word processor with a large screen facilitates whole-class shared writing activities. Additions, deletions and text rearrangements can easily be made as the writing evolves. Such activities also provide opportunities for demonstration or for 'scaffolding', which are often needed as children learn to write. Editing together on the big screen further highlights the editing process as it extends the size of the authors' circle.

- Children can use the facilities of block copy, move and delete, and search and replace in order to rearrange text that has been jumbled up, such as

  - paragraphs within a text
  - stanzas in a narrative poem
  - lines of a limerick
  - a joke question and its reply.

  They can also replace words within a poem such as 'Jabberwocky'. Used in conjunction with an authors' circle these activities can extend children's understanding of editing for meaning.

- The search and replace functions of the word processor can be used during a conference not just for spelling, but to highlight the excessive or inappropriate use of words such as 'nice', 'then' and 'said'. Thesauri and style and spelling checkers can also support the writer's attempts to refine structure and content to enhance meaning.

PUBLISHING WITH A COMPUTER

Using a word processor for publishing stories is probably the most popular use of microcomputers in primary schools today. However, our concept of 'electronic publishing' need not be restricted to enhancing paper-based publishing. With the advent of affordable telecommunications, networking, enhanced graphics manipulation and more sophisticated software, the range of publishing media available to children has been greatly expanded.

PUBLISHING TO PAPER

Word processors enable children to easily proofread and correct their writing in order to publish a beautifully printed piece of work. Word processors with large print, a variety of fonts and coloured printer ribbons can further enhance the presentation. Other programs that can support publishing to paper include the following.

- PRINTSHOP and PRINTMASTER programs allow children to produce patterned covers, personal letterheads, fancy headings, greeting cards and banners.

- Newspaper emulators with the ability to print in columns, and with graphics libraries, can be used to produce class newspapers, notes, memos and signs.

- Drawing tools, such as DAZZLE DRAW, MACPAINT and BEE-ARTISTIC, can produce many illustrations, decorations and logos to enhance publications.

- Text and graphic software, e.g. STORYMAKER and KIDWRITER, can be used to illustrate existing writing or to produce publications with integrated text and graphics, e.g. rhebus stories.

The existence of such tools has enabled children to be their own publishers and produce end results more like the 'real world' of publishing.

PUBLISHING BEYOND PAPER *... to screen, to disk, to video, to the phone line ...?*

This area of computer-based publishing is possibly the most exciting as it has the potential to take children's writing into the electronic age. It extends and challenges perceptions about the finality and permanence of the printed word and promotes the idea of the 'evolving story'. It is able to extend visual imagery into the world of colour and animation to enhance meaning. Its interactive nature and the immediacy of response points towards a merging of author and audience. It can dramatically widen the audience for a child's writing in terms of both distance and number.

Publishing to Disk

Children's work saved to disk can be sent to others for viewing on their screens (as in TELEBOOK) or printing

out (as with word processing files). KEYBOARD CONNECTIONS is a service which facilitates the latter form of sharing. It is a network of children within Australia and overseas, who swap stories, articles and ideas by regularly sending disks containing contributions to a central collection point. The contributions are then organised on one disk and a copy of this is returned to each member. The service offers a vehicle for publication as well as models of writing. While the audience is large and widespread, the children have final control of what use is made of the material.

Publishing to Screen

Young writers can now publish to the screen and achieve a dynamism not previously possible.

- Colour filters in programs such as MASTERTYPE WRITER enable the child to hide text. This text can be revealed later in a mystery story. The filter capability can also be used to produce a piece of writing for different interest or ability levels.

- Cartoons provide a link between the spoken and formal written modes of language. They can be produced using suitable software and then printed to paper or shown on the screen with the computer 'turning the pages'. This page-turning facility can be used to animate text and simple graphics in much the same way as flip books do and so introduce movement to text.

- Using programs such as FANTAVISION and TELEBOOK, children can add animation to graphics and coloured text to their writing. They can have a bright yellow sun flashing on the screen above a rural scene and the words *'It was a lovely sunny day ...'* ; they can tell a sad tale in blue text which slowly dissolves into a tear, or write a romance and have the words *'throbbing heart'* in red flashing text. They are no longer restricted to static, paper-based output. The published work on the screen matches what may be seen elsewhere in our increasingly screen-based environment.

- The addition of appropriate music via a tape recorder can help writing come alive – as a supernova explodes on the screen, popcorn pops, or a little stick figure gestures to the music of 'Rocky'. Other programs, such as PAZAZZ, allow the music to be an integral part of the performance by including music-making facilities.

- Videotext emulators, such as MIKEFAX, allow children to be the information providers on their local system, mirroring the real-world use of such information systems. With these emulators they can set up their own bulletin board with double-height, videotext-style print and block graphics, with both colour and flashing capabilities. Placed in the library where other children, teachers and parents frequently visit, the videotext system can display information about school and class events, new books and other school resources, canteen offerings and coming events outside the school, and also display stories, poems and graphics created by individuals or groups of children.

- Using a phone line and the electronic file transfer facilities of some programs like TELEBOOK and NEWSROOM, children can publish their writing to someone's screen or printer across the classroom, the city, the state or around the world.

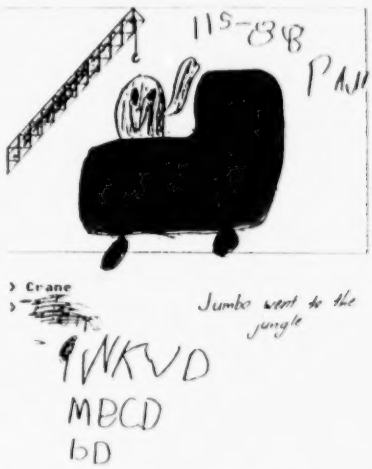
- Using a phone line and electronic mail systems children can publish to others' 'letterboxes' or to bulletin boards.

Publishing to Video

Publishing to a screen can be taken one step further with the program CARTOON. This program of prepackaged animated scenes allows children to develop and save their own cartoon sequences to disk (and make their own graphics if need be). This file can then be recorded on video and – with the addition of a sound track/dialogue – the child has become a film maker.

CONCLUSIONS

The introduction of a computer with appropriate software enables us to move from the familiar world of writing words and producing them on paper to a whole new area of writing with text and graphics for the electronic media. We can explore alternative forms of output and move from paper to screens and videos, and across the world via the phone line. As we explore these alternatives, our audience can expand in both number and distance.



A beginning writer's response to an adventure game.

The computer can also offer structure for those who require it. It can stimulate and prompt, provide a framework if necessary, or be an open and flexible writing tool. It can take us into a range of writing styles and formats via these structures, or leave us free to explore our own, using words, graphics, sounds, colour and movement. Our purposes can shift from the personal to the informative across a range of audiences and formats.

Such a range of choices requires decision-making and management. We must be watchful that audience and purpose are not lost in an exploration of the features of a package or the technique of using it. At times the electronic managing of the functions can distance writers from their words, and they may be

alienated from their work through its constant tidiness on the screen. We must be careful not to be dazzled by the colour and movement and not to set up activities which work against our educational aims and principles. The child's freedom to choose style, topic and writing implement must remain. The activities listed in this PEN are seen as opportunities to expand the range of options, not to impose new structures. Nor are they to be offered out of context and bereft of a meaningful purpose. The tool is, in a sense, value-free – success lies in its use within a sound, balanced writing environment.

The endlessness of the possibilities offered by the use of computers in writing generates an excitement felt by many teachers. This endlessness also creates an imperative that our explorations be guided by our children's needs and interests and our knowledge of the writing process.

SOFTWARE LIST

ANIMATION is produced by Greymatter Software for the Microbee.

AUSSIE FRED is a public domain disk available for the Apple from Apple Education dealers.

BEE-ARTISTIC is produced by Exitek for the Microbee.

CARTOON is available on the BBC to Catholic schools in Sydney from the CEO and to all other schools through Edsoft and JPR Software.

CHAINWORDS is produced by Goodison for the Microbee.

DAZZLE DRAW is produced by Broderbund for the Apple.

EXPLORE-A-STORY has a series of titles. It is produced by D.C. Heath for the Apple (128k) and is available through Data Flow. It is most effective on a colour screen.

FACEMAKER is on the BEST FOUR LANGUAGE package produced by ASK for the BBC. Apple and Commodore versions are produced by Spinnaker.

FACTORY is produced by Sunburst for the Apple and BBC.

FANTAVISION is produced by Broderbund for the Apple.

FRONT PAGE is on the Mape disk available to Catholic Schools in Sydney through the CEO.

GARFIELD is produced by DLM for the Apple. The Delux Edition allows for a colour print-out on a colour printer.

GOLD DUST ISLAND is produced by Jacaranda Software for the Apple, BBC, Commodore and Microbee.

THE HOBBIT is produced by Cambridge for the Apple and BBC.

THE HITCHHIKERS GUIDE TO THE GALAXY is produced by Imagineering for the Apple.

IDENT 'E' KIT is produced by Kerwin Software for the Microbee.

KEYBOARD CONNECTIONS is a service centred at Miller Computer Education Centre, Miller Public School, Shropshire St, Miller 2168.

KIDWRITER is produced by Spinnaker for the Apple, Commodore 64 and IBM PC.

MACPAINT is produced by Apple for the Macintosh.

MALLORY MANOR, for the BBC, is on the Primary Language disk available to Catholic schools in Sydney through the CEO, and on the Adventure One disk available to all other schools through Edsoft and JPR Software.

MASTERTYPE WRITER is produced by D. C. Heath for the Apple (128k) and Commodore 64.

MIKEFAX, for the BBC, is available to Catholic schools through the CEO.

NEWSROOM is produced by Springboard for the Apple (64k), IBM PC, IBM PC jr and Commodore 64. Teacher's notes and extra clip art disks are available.

PAINT WITH WORDS is produced by MECC for the Apple (64k).

PAZAZZ is produced by ASK for the BBC.

PODD is available on the BEST FOUR LANGUAGE package produced by ASK for the BBC.

PRESSROOM is produced by Kerwin for the Microbee.

PRINTMASTER is produced by Unison World for the Amstrad, Apple, Atari, Commodore, IBM PC, Microbee and IBM JX. Extra graphics disks are available.

PRINT SHOP is produced by Broderbund for the Apple, Commodore, Atari, Macintosh and IBM PC. Extra graphics disks and PRINT SHOP COMPANION are available.

SETTLEMENT is produced by Elizabeth Computing Centre, Department of Education, Tasmania, for the BBC.

SHIPWRECK ISLAND is produced by Goodison Software for the Microbee.

SIMPLY WRITE is produced and distributed by Microbee Systems for the Microbee.

SOFTWORD is produced and distributed from Angle Park Computing Centre, Trafford St, Angle Park, South Australia 5010, for the BBC.

STORY is produced by H & H Software for the BBC.

STORYMAKER is distributed by Scholastic for the Apple (64k).

STORY TRACKS is produced by J&H Beesware for the Microbee.

STORY TREE is produced by Scholastic for the Apple (48k).

SURVIVE is produced by McGraw-Hill for the BBC.

TAKE A HOLIDAY and FANTASY ISLE are produced by Prologic for the Apple, BBC, Commodore 64 and IBM PC.

TALKBACK is produced and distributed by Angle Park Computing Centre, Trafford St, Angle Park, South Australia 5010, for the BBC.

TELEBOOK is produced by 4mation software for the BBC.

TINS and WORDPLAY are both on the Primary Language disk available to Catholic schools in Sydney through the CEO.

TOADY is published by Des Kilroy for the Microbee. TOADY GOES TO SCHOOL will soon be available from Edsoft.

TRAY is available in primary and infants versions to Sydney Catholic schools. Similar programs include SHERLOCK, a public domain program for the Apple, TIE TRACER, produced by Jacaranda for the Apple, BBC and Commodore, and CLUEDO for the Microbee.

VENTURE WRITER is produced by the NSW Education Department and is available to schools in NSW through Teaching Resources, Burwood, and to other schools through various dealers.

WRITING ADVENTURE is produced by DLM for the Apple and Commodore.

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